

MATERIAL SAFETY DATA SHEET

Republic Powdered Metals, Inc.

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NPCA - HMIS RATING METHOD

HEALTH	1
FIRE	0
REACTIVITY	0

I. PRODUCT IDENTIFICATION

MSDS # 9101

TRADE NAME: RAMUC TYPE DS

SYNONYMS: Water based paint.

SHIPPING NAME -- U.S. DOT: Not Regulated
IMDG: N/A
IATA: N/A

II. INGREDIENTS

HAZARDOUS COMPONENTS	CAS#	WEIGHT %	OSHA PEL	ACGIH TLV	SARA 313
BariumSulfate*	7727-43-7	<15	5.0 mg/m ³	10 mg/m ³	Yes
Silica*	14808-60-7	<10	0.1 mg/m ³	0.1 mg/m ³	No
Butyl Cellosolve	111-76-2	<5	50 ppm	25 ppm	No
DiacetoneAlcohol	123-42-2	<5	50 ppm	50 ppm	No
EthyleneGlycol	107-21-1	<2	125 mg/m ³	50 ppm	Yes
NON-HAZARDOUS COMPONENTS					
AcrylicLatex	T/S	-	-	-	-
TitaniumDioxide*	13463-67-7	<15	-	5 mg/m ³	No

* Nuisance dust hazard only when removing dry coating - 5 mg/M3 respirable fraction, no asbestos.
TSCA Status: Ingredients are in-compliance with TSCA inventory requirements.

III. PHYSICAL DATA

INITIAL BOILING POINT: 212½F
VAPOR DENSITY: Heavier than air
FREEZING POINT: 32½F
APPEARANCE AND ODOR: Viscous liquid with a mild ammonia odor.

SPECIFIC GRAVITY (H₂O = 1): 1.39
SOLUBILITY IN WATER: Soluble
EVAPORATION RATE: Slower than n-Butyl Acetate
VOC: 180 g/l
pH: 9.5

IV. FIRE AND EXPLOSION DATA

FLASH POINT °F (Tag Closed Cup): None
EXTINGUISHING MEDIA: N/A
SPECIAL FIRE FIGHTING PROCEDURES: N/A
FIRE & EXPLOSIVE HAZARDS: None

FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: N/A UPPER: N/A

V. REACTIVITY DATA

CONDITIONS TO AVOID: None known.

INCOMPATIBILITY: Oxidizes and strong alkalies.

HAZARDOUS POLYMERIZATION: Will not occur.

STABILITY: Stable

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Fire conditions may yield oxides of carbon.

VI. HEALTH HAZARD INFORMATION

EFFECTS OF OVEREXPOSURE - AVENUE OF ENTRY:

EYES: Contact with liquid irritate eyes.

SKIN: Possible irritation. Possible irritation for sensitive individuals.

INHALATION: Vapors could cause irritation of eyes and nose in some individuals.

SWALLOWING: Ingestion of large amounts could give toxic effects.

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm.

FIRST AID:

IF IN EYES: Immediately flush eyes with copious amounts of water.

IF ON SKIN: Wash skin thoroughly with soap & water.

IF INHALED: Remove to fresh, room temperature air.

IF SWALLOWED: Do not induce vomiting. Call physician or hospital emergency room. Do not attempt to give anything by mouth to an unconscious person.

VII. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Dike and absorb spill with inert material (sand, etc.) and dispose of suitably.

WASTE DISPOSAL METHOD: Dispose of in accordance with federal, state and local regulations.

PRECAUTIONS TO TAKE IN STORAGE AND HANDLING: This product should be kept from freezing during shipping and handling. Although freezing represents no hazard, it may ruin the product.

OTHER PRECAUTIONS: This product contains trace amounts of aqueous ammonia and slight traces of residual acrylic monomers and formaldehyde carried in with the acrylic latex polymer and surfactant used. These trace levels are below reporting requirements in the hazardous components Section II. Although these are toxic chemicals, at these trace levels they should produce no harmful effects if this product is handled with normal care and caution. **CAUTION: KEEP OUT OF REACH OF CHILDREN.**

VIII. SAFE HANDLING AND USE INFORMATION

RESPIRATORY PROTECTION: Self-contained breathing apparatus for concentrations above TLV limits.

VENTILATION: General ventilation.

PROTECTIVE GLOVES: Gloves impervious to water based materials.

EYE PROTECTION: Splash proof goggles.

OTHER PROTECTIVE EQUIPMENT: Apron, work clothes, etc.

HYGIENIC PRACTICES: After using product, wash hands with soap and water.

IX. DISCLAIMER

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with Republic or not. Recipients are advised to confirm in advance of need that the information is current, applicable and suitable to their circumstances.

DEFINITIONS

HMIS - Hazardous Materials Identification System
DOT - Department of Transportation
PEL - Permissible Exposure Limit
LC 50 - Lethal Concentration
RCRA - Resource Conservation & Recovery Act
T/S - Trade Secret

VOC - Volatile Organic Compound
CAS - Chemical Abstracts Service
TLV - Threshold Limit Value
LD 50 - Lethal Dose
CFR - Code of Federal Regulations
N/A - Not Available

ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety & Health Administration
NPCA - National Paint & Coatings Association
SARA - Superfund Amendments & Reauthorization Act of 1986
NIOSH - National Institute for Occupational Safety & Health
N/E - Not Established

TRADE NAME: RAMUC TYPE DS

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ADDRESS: 3735 Green Road, Beachwood, OH 44122

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